CHROMOSOME NUMBERS OF ASTER BLAKEI AND A. NEMORALIS¹

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Pike (1970) has presented morphological and geographical evidence for the possible hybrid origin of Aster Blakei (Porter) House from A. acuminatus Michx. and A. nemoralis Ait. Investigations of the chemistry and cytology of controlled interspecific crosses of this complex have been continued in our laboratory. One of the first results of this study has been the determination of the chromosome numbers of two of these taxa which have not been published to date. Root tips of all plants studied were pretreated with 8oxyquinoline and stained and squashed according to a schedule used by Huziwara (1957). The slide and cover slip were separated using a method described by Celarier (1956). Both slide and cover slip were run through an acetic acid — ethyl alcohol series (1:1, 1:3, 1:9) and two changes of absolute ethyl alcohol before being recombined in Diaphane. The chromosome numbers are listed in Table I. The number obtained for A. acuminatus is in agreement with that of Nelson (1966). Voucher specimens of the plants from which these numbers were obtained are housed in the University of New Hampshire Herbarium.

Table I. Chromosome numbers of Aster spp.

Aster acuminatus2n - 18Aster Blakei2n - 18Aster nemoralis2n - 18

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